

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,445	06/24/2003	Alexander Govyadinoy	200209320-1	4375
7590 10/01/2004			EXAMINER	
HEWLETT-PACKARD COMPANY			TRAN, THIEN F	
Intellectual Property Administration P.O. Box 272400			ART UNIT	PAPER NUMBER
Fort Collins, C	O 80527-2400		2811	

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
<b></b>	10/603,445	GOVYADINOY ET AL.	
Office Action Summary	Examiner	Art Unit	
	Thien F Tran	2811	m
The MAILING DATE of this communication appeariod for Reply	ppears on the cover sheet w	ith the correspondence addre	)SS
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 136(a). In no event, however, may a ply within the statutory minimum of thin d will apply and will expire SIX (6) MON to, cause the application to become Al	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this comm  BANDONED (35 U.S.C. § 133).	nunication.
Status			
1) Responsive to communication(s) filed on 23	July 2004.		
	is action is non-final.		
3) Since this application is in condition for allow closed in accordance with the practice under	·	•	erits is
Disposition of Claims			
4) ☐ Claim(s) 1-51 is/are pending in the application 4a) Of the above claim(s) 42-45 is/are withdrasts.  5) ☐ Claim(s) 24-41 and 46-51 is/are allowed.  6) ☐ Claim(s) 1,4,5,18 and 23 is/are rejected.  7) ☐ Claim(s) 2,3,6-17 and 19-22 is/are objected to the subject to restriction and the subject to restrict the sub	awn from consideration.		
Application Papers			
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) acceptant may not request that any objection to the Replacement drawing sheet(s) including the correct all The oath or declaration is objected to by the B	ccepted or b) objected to e drawing(s) be held in abeya ection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR	
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document copies of the priority document copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of	nts have been received. nts have been received in A iority documents have beer au (PCT Rule 17.2(a)).	Application No  received in this National Sta	age
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0-Paper No(s)/Mail Date 06/24/2003.	Paper No(	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-15 	52)

#### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election with traverse of claims 1-41 and 46-51 in the reply filed on 07/23/2004 is acknowledged. The traversal is on the ground(s) that there is no burden placed upon the examiner to examine all claims. This is not found persuasive because the product and process are located in different classes, 438 and 257, respectively, placing an undue burden upon the examiner.

The requirement is still deemed proper and is therefore made FINAL.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-5, 18 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al. (US 6,188,167).

Endo et al. discloses the claimed electronic device (Fig. 24) comprising a substrate (81, 82); a well 82a defined in the substrate; a tip emitter 80 formed in the well 82a; a gate electrode (an extractor 83) disposed about the well inherently providing the function as claimed, to extract emissions from the tip emitter; a wide lens 71a spaced apart from the extractor 83 for focusing the emissions through an opening defined in the wide lens, the opening having a

Application/Control Number: 10/603,445

Art Unit: 2811

diameter greater than a diameter of the well 82a; and an aperture 85a disposed between the extractor 83 and the wide lens.

Regarding claim 4, the device further comprises extractor level focusing means 83 for focusing the emissions toward the aperture 85a.

Regarding claim 5, the extractor level focusing means 83 comprises the extractor 83 being formed as a circular electrode about the well.

Regarding claim 18, the device further comprises a shield 71b disposed on a side of the wide lens 71a that is facing away from the aperture 85a.

Regarding claim 23, the tip emitter 80 is one of a plurality of tip emitters forming the emitter array.

## Allowable Subject Matter

Claims 24-41 and 46-51 are allowed.

Claims 2-3, 6-17, 19-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien F Tran whose telephone number is (571) 272-1665. The examiner can normally be reached on 8:30AM - 5:00PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C Lee can be reached on (571) 272-1732. The fax

Art Unit: 2811

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt September 23, 2004

THIENTRAN
PRIMARY EXAMINER